NEVADA DEPARTMENT OF CONSERVATION & NATURAL RESOURCES

STATE ENVIRONMENTAL COMMISSION

HEARING ARCHIVES FOR

REGULATORY PETITIONS

COMMISSION PETITION NO. 96004

LEGISLATIVE COUNSEL BUREAU (LCB) FILE NO. R-128-95

DOCUMENTS INCLUDED IN THIS FILE:

YES **SECRETARY OF STATE FILING FORM**

YES **DISCLOSURE STATEMENT PURSUANT TO NRS 233B**

REGULATORY PETITIONS

ORIGINAL DRAFTED BY COMMISSION

ADOPTED BY COMMISSION

YES **AS FILED AND CODIFIED BY LCB**

Secretary of State Filing Data	For Filing Administrative Regulations	For Emergency Regulations Only
		Effective Date _____ Expiration Date _____ _____ Governor's Signature

Nevada State Environmental Commission

Classification [ ] Proposed [ ] Adopted By Agency [**xx**] Temporary [ ] Emergency [ ]

Brief description of action: Petition 96004 permanently amends NAC 445.144, standards for toxic materials applicable to designated waters. The proposed regulation updates the municipal and domestic supply standards with current federal maximum contaminant levels for various metals, including barium, cadmium, chromium, selenium and silver. In addition, it is proposed to delete the aquatic standard for boron.

Authority citation other than 233B: NRS 445.210 and 445.244.

Notice date: October 6, October 12, and October 24, 1995

Hearing date: November 7, 1995

Date of Adoption of Agency: November 7, 1995

LEGISLATIVE REVIEW OF ADOPTED REGULATIONS AS REQUIRED BY ADMINISTRATIVE PROCEDURES ACT, NRS 233B.066
PETITION 96004
LCB FILE R-128-95

The following statement is submitted for adopted amendments to Nevada Administrative Code (NAC) 445A.

1. A description of how public comment was solicited, a summary of public response, and an explanation how other interested persons may obtain a copy of the summary.

Petition 96004 (R-128-95) was noticed three (3) times: October 6, October 12 and October 24, 1995 in the Las Vegas Review Journal, the Reno Gazette-Journal newspapers, the Humboldt Sun and the Elko Daily Free Press as a permanent regulation. Comments from the public focused on the possible long term impact to aquatic species due to higher threshold being applied due to potential increases in boron. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (702) 687-4670, or writing to the Commission at 333 W. Nye Ln., Room 128, Carson City, Nevada 89710.

2. The number persons who:

(a) Attended each hearing; 36
(b) Testified at each hearing: 7
(c) Submitted to the agency written comments: Comments were submitted by the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, Nevada Mining Association, Commissioner Fred Gifford, Barrick Goldstrike Mine, Independence Mining Company and the Sierra Club.

3. A description of how comment was solicited from affected businesses, a summary of their response, and a explanation how other interested persons may obtain a copy of the summary.

Comments were solicited from affected businesses by the notices in the newspapers, as outlined in #1 and by direct mail to interested persons subscribing to the Commission's mailing list. Comments from interested businesses included the Nevada Mining Association, Barrick Gold Strike Mine and Independence Mining Co. The comments focused on support of the Bureau of Water Quality Planning's to deleting the aquatic life standard for boron. The comments focused on the lack of scientific evidence regarding the existing boron standard. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (702) 687-4670 or writing to the Commission at 333 W. Nye Ln., Room 128, Carson City, Nevada 89710.

4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.

The permanent regulation was adopted at the State Environmental Commission hearing on November 7, 1995 with no changes made to the regulation. The Commission responded to public and business comments regarding the lack of scientific basis for an aquatic standard for boron.

5. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public. These must be stated separately, and each case must include:

(a) Both adverse and beneficial effects: and
(b) Both immediate and long-term effects.

a. The proposed revisions are expected to have an immediate or long term benefical economic effect upon the regulated community.

b. There is no estimated economic effect on the public, either adverse or beneficial, nor immediate or long-term.

6. The estimated cost to the agency for enforcement of the adopted regulation.

There is no additional cost to the agency for enforcement of this regulation.

7. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.

There are no other state or government agency regulations which the proposed amendments duplicate.

8. If the regulation includes provisions which are more stringent than a federal regulation which regulates the same activity, a summary of such provisions.

Code of Federal Regulations in sections 40 C.F.R. 131.10, 40 C.F.R. 131.11 and 40 C.F.R. 131.12 require the State to designate beneficial uses, adopt criteria to protect the uses and to adopt an antidegradation policy. There are no federally promulgated water quality standards for Nevada with the exception of toxic materials contains in 40 C.F.R. 131.36(d)(11) which is not a duplication of proposed action. Therefore, the proposed regulations are in compliance with Federal regulations and are not more stringent than Federal requirements and regulations.

9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.

This regulation does not provide or involve a new fee, and hence since no fee is involved there is not a total amount expected to be collected or used.

ADOPTED PERMANENT REGULATION OF THE NEVADA STATE ENVIRONMENTAL COMMISSION

LCB File No. R128-95

EXPLANATION: Matter in ***italics*** is new; matter in brackets **[ ]** is material to be omitted.

AUTHORITY: NRS 445.201 and NRS 445.244

Section 1. NAC 445A.144 is hereby amended to read as follows:

445A.144 Except as otherwise provided in this section, the following standards for toxic materials are applicable to the waters specified in NAC 445A.123 to 445A.127, inclusive, and NAC 445A.145 to 445A.225, inclusive. If the standards are exceeded at a site and are not economically controllable, the commission will review and adjust the standards for the site.

Chemical	**Municipal or Domestic Supply** (Fg/l)	**Aquatic Life** (Fg/l)	**Irrigation** (Fg/l)	**Watering of Livestock** (Fg/l)
Antimony	146[a]	-	-	-
Arsenic	50[b]	-	100[c]	200[d]
Arsenic (III)	-	-	-	-
1-hour average	-	342[a,g]	-	-
96-hour average	-	180[a,g]	-	-
Barium	**[1,000[a,b]]*2,000***[b]	-	-	-
Beryllium	0[a]	-	100[c]	-
hardness <75 mg/l	-	-	-	-
hardness >=75 mg/l	-	-	-	-
Boron	-	**[550[e]]**	750[a]	5,000[d]
Cadmium	**[10[a,b]]*5***[b]	-	10[d]	50[d]
1-hour average	-	0.85exp{1.128 In(H)-3.828}[a,g]	-	-
96-hour average	-	0.85exp{0.7852In(H)-3.490}[a,g]	-	-
Chromium (total)	**[50[b]]*100***[b]	-	100[d]	1,000[d]
Chromium (VI)	-	-	-	-
1-hour average	-	15[a,g]	-	-
96-hour average	-	10[a,g]	-	-
Chromium (III)	-	-	-	-
1-hour average	-	0.85exp{0.8190 In(H)+3.688}[a,g]	-	-
96-hour average	-	0.85exp{0.8190 In(H)+1.561}[a,g]	-	-

Copper	-	-	200[d]	500[d]
1-hour average	-	0.85exp{0.9422 In(H)-1.464}[a,g]	-	-
96-hour average	-	0.85exp{0.8545 In(H)-1.465}[a,g]	-	-
Cyanide	200[a]	-	-	-
1-hour average	-	22[a]	-	-
96-hour average	-	5.2[a]	-	-
Fluoride	-	-	1,000[d]	2,000[d]
Iron	-	1,000[a]	5,000[d]	-
Lead	50[a,b]	-	5,000[d]	100[d]
1-hour average	-	0.50exp{1.273 In(H)-1.460}[a,g]	-	-
96-hour average	-	0.25exp{1.273 In(H)-4.705}[a,g]	-	-
Manganese	-	-	200[d]	-
Mercury	2[b]	-	-	10[d]
1-hour average	-	2.0[a,g]	-	-
96-hour average	-	0.012[a]	-	-
Molybdenum	-	19[e]	-	-
Nickel	13.4[a]	-	200[d]	-
1-hour average	-	0.85exp{0.8460 In(H)+3.3612}[a,g]	-	-
96-hour average	-	0.85exp{0.8460 In(H)+1.1645}[a,g]	-	-
Selenium	**[10[a,b]]*50***[b]	-	20[d]	50[d]
1-hour average	-	20[a]	-	-
96-hour average	-	5.0[a]	-	-
Silver **[50[a,b]]**	0.85exp{1.72 In(H)-6.52}[a,g]	-	-	
Sulfide				
undissociated hydrogen				
sulfide	-	2[a]	-	-
Thallium	13[a]	-	-	-
Zinc -	-	-	2,000[d]	25,000[d]
1-hour average	-	0.85exp{0.8473 In(H)+0.8604}[a,g]	-	-
96-hour average	-	0.85exp{0.8473 In(H)+0.7614}[a,g]	-	-
Acrolein	320[a]	-	-	-
Aldrin	0[a]	3[a]	-	-
Chlordane	0[a]	2.4[a]	-	-
24-hour average	-	0.0043[a]	-	-
2,4-D 100[a,b]	-	-	-	
DDT & metabolites	0[a]	1.1[a]	-	-
24-hour average	-	0.0010[a]	-	-
Demeton	-	0.1[a]	-	-
Dieldrin	0[a]	2.5[a]	-	-
24-hour average	-	0.0019[a]	-	-
Endosulfan	75[a]	0.22[a]	-	-
24-hour average	-	0.056[a]	-	-

Endrin	0.2[b]	0.18[a]	-	-
24-hour average	-	0.0023[a]	-	-
Guthion	-	0.01[a]	-	-
Heptachlor	-	0.52[a]	-	-
24-hour average	-	0.0038[a]	-	-
Lindane	4[b]	2.0[a]	-	-
24-hour average	-	0.080[a]	-	-
Malathion	-	0.1[a]	-	-
Methoxychlor	100[a,b]	0.03[a]	-	-
Mirex 0[a]	0.001[a]	-	-	
Parathion	-	-	-	-
1-hour average	-	0.065[a]	-	-
96-hour average	-	0.013[a]	-	-
Silvex	10[a,b]	-	-	-
(2,4,5-TP)				
Toxaphene	5[b]	-	-	-
1-hour average	-	0.73[a]	-	-
96-hour average	-	0.0002[a]	-	-
Benzene	5[b]	-	-	-
Monochlorobenzene	488[a]	-	-	-
m-dichlorobenzene	400[a]	-	-	-
o-dichlorobenzene	400[a]	-	-	-
p-dichlorobenzene	75[b]	-	-	-
Ethylbenzene	1,400[a]	-	-	-
Nitrobenzene	19,800[a]	-	-	-
1.2 dichloroethane	5[b]	-	-	-
1.1.1-trichloroethane (TCA)	200[b]	-	-	-
Bis(2-chloroisopropyl) ether	34.7[a]	-	-	-
Chloroethylene	2[b]	-	-	-
(vinyl chloride)				
1.1-dichloroethylene	7[b]	-	-	-
Trichloroethylene (TCE)	5[b]	-	-	-
Hexachlorocyclopentadiene	206[a]	-	-	-
Isophorone	5,200[a]	-	-	-
Trihalomethanes (total)[f]	100[b]	-	-	-
Tetrachloromethane	5[b]	-	-	-
(carbon tetrachloride)				
Phenol	3,500[a]	-	-	-
2,4-dichlorophenol	3,090[a]	-	-	-
Pentachlorophenol	1,010[a]	-	-	-
1-hour average	-	exp{1.005 (pH)-4.830}[a]	-	-
96-hour average	-	exp{1.005 (pH)-5.290}[a]	-	-
Dinitrophenols	70[a]	-	-	-
4,6-dinitro-2-methylphenol	13.4[a]	-	-	-
Dibutyl phthalate	34,000[a]	-	-	-

Diethyl phthalate	350,000[a]	-	-	-
Dimethyl phthalate	313,000[a]	-	-	-
Di-2-ethylhexyl phthalate	15,000[a]	-	-	-
Polychlorinated biphenyls				
(PCBs)	0[a]	-	-	-
24-hour average	-	0.014[a]	-	-
Fluoranthene	42[a]	-	-	-
(polynuclear aromatic hydrocarbon)				
Dichloropropenes	87[a]	-	-	-
Toluene	14,300[a]	-	-	-

Footnotes and References

(1) Single concentration limits and 24-hour average concentration limits must not be exceeded. One-hour average and 96-hour average concentration limits may be exceeded only once every 3 years. See reference a.

(2) Hardness (H) is expressed as mg/1 $CaCO_3$.

(3) If a **[criteria]** ***criterion*** is less than the detection limit of a method that is acceptable to the division, laboratory results which show that the substance was not detected will be deemed to show compliance with the standard unless other information indicates that the substance may be present.

(4) If a standard does not exist for each designated beneficial use, a person who plans to discharge waste must demonstrate that no adverse effect will occur to a designated beneficial use. If the discharge of a substance will lower the quality of the water, a person who plans to discharge waste must meet the requirements of NRS 445.253.

(5) The standards for metals are expresses as total recoverable, unless otherwise noted.

a. U.S. Environmental Protection Agency, Pub. No. EPA 440/5-86-001, Quality Criteria for Water (Gold Book) (1986).

b. Federal Maximum Contaminant Level (MCL), 40 C.F.R. §§ 141.11, 141.12, 141.61 and 141.62 **[(1988.)]** ***(1992)***.

c. U.S. Environmental Protection Agency, Pub. No. EPA 440/9-76-023, Quality Criteria for Water (Red Book) (1976).

d. National Academy of Sciences, Water Quality Criteria (Blue Book) (1972).

e. California State Water Resources Control Board, Regulation of Agricultural Drainage to the San Joaquin River: Appendix D, Water Quality Criteria (March 1988 revision).

f. The criteria for trihalomethanes (total) is the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform) and trichloromethane (chloroform). See reference b.

g. This standard applies to the dissolved fraction.

END OF LCB File No. R128-95